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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,380	02/06/2002	Aaron C. Mansfield	898-P-5	2585
7	7590 08/27/2003			
Gregory J. Nelson NELSON & ROEDIGER Suite 212			EXAMINER	
			BINDA, GREGORY JOHN	
3333 E. Camelback Road Phoenix, AZ 85018			ART UNIT	PAPER NUMBER
,			3679	
			DATE MAILED: 08/27/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

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. 19/		Application No.	Applicant(s)			
		10/072,380	MANSFIELD ET AL.			
Offic Action Summary		Examiner	Art Unit			
		Greg Binda	3679			
The MAILING DATE of this communication appears on the cover sheet with the c rrespondence address						
Period fo	• •	/ IS SET TO EVOIDE 2 MONTH/	e) EDOM			
THE N - Exten after S - If the - If NO - Failur - Any re	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 09 J	<u>uly 2003</u> .				
2a)□	This action is FINAL . 2b)⊠ Thi	s action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4)⊠	Claim(s) 1-11 is/are pending in the application					
	4a) Of the above claim(s) <u>11</u> is/are withdrawn fo	rom consideration.				
5)	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-10</u> is/are rejected.					
7) 🗀	Claim(s) is/are objected to.					
8) 🗌	Claim(s) are subject to restriction and/or	r election requirement.				
Applicati	on Papers					
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>09 July 2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
	 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 					
* 8	application from the International Bur See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).				
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
) \square The translation of the foreign language pro Acknowledgment is made of a claim for domesti					
Attachment	t(s)	•				
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	/ (PTO-413) Paper No(s) Patent Application (PTO-152)			

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In accordance with MPEP §§ 609, 707.05, and 2001.06(b), the prior art cited in the parent application was reviewed prior to preparation of this Office action.

Election/Restrictions

1. Applicant's election with traverse of an upper gearset support (Group I) in Paper No. 6 is acknowledged. The traversal is on the ground(s) that there is no material difference between the processes of using the upper gearset support in new and modified constructions. This is not found persuasive because the process of using the upper gearset support in a new construction could include the step of casting the upper case in such a shape so as to accept the support instead of machining the upper case (as recited in claim 11).

The requirement is still deemed proper and is therefore made FINAL.

Claim 11 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being 2. drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

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Drawings

- 3. The drawings filed July 9, 2003 are objected to as failing to comply with:
 - a. 37 CFR 1.84(h)(5) because Fig. 8 shows modified forms of construction in the same view. See fixed retainer 340 and "THREADED DESIGN".
 - b. 37 CFR 1.84(p)(4) because:
 - i. Reference numeral 27 identifies an upper end of body 26 in Fig. 2 (see also page 8, line 1) and an unidentified object or feature in Fig. 3.
 - ii. Reference numeral 31 identifies a machined area in Figs. 2 & 5 (see also page 7, line 19), an unidentified object in Fig. 1, and another unidentified object or feature in Fig. 3.
 - Reference numeral 38 identifies a bearing in Figs. 1, 3 & 5 (see also page 8, line 2) and an unidentified object or feature in Fig. 4.
 - iv. Reference numeral 52 identifies a stepped surface in Fig. 4 (see also page 8, line 10) and an unidentified object or feature in Fig. 2.
 - v. In Fig. 1 reference numerals 64 & 66 are each used twice to identify two different parts.
 - vi. Reference numeral 50 identifies a port in Figs. 2, 3 & 5 and an O-ring in Fig. 4.
 - vii. In Fig. 3 reference numeral appears to indicate internal threads in spanner nut/retainer 40. It does not appear to indicate external threads on body 26 as in Fig. 2 and on page 8, line 6. (Note in Fig. 2 that spanner nut 40 engages only a portion of the threads 39.)

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viii. Reference numeral 54 identifies a port in Fig. 3, a protrusion in Fig. 4, and wall in Fig. 5.

- ix. In Fig. 7 reference numeral 140 should be changed to 240. See page 12, line 2.
- c. 37 CFR 1.84(p)(5) because they do not include:
 - i. Reference numeral 16 mentioned in the description on page 6, line 10.
 - ii. Reference numeral 131 mentioned in the description on page 10, line 19.
 - iii. Reference numeral 257 mentioned in the description on page 11, line 19.
 - iv. Reference numeral 239 mentioned in the description on page 12, line 1.
 - v. Reference numeral 275 mentioned in the description on page 12, line 2.
 - vi. Reference numeral 260 mentioned in the description on page 12, line 3.
 - vii. Reference numeral 341 mentioned in the description on page 12, line 18.
 - viii. Reference numeral 396 mentioned in the description on page 12, line 20.
 - ix. Reference numeral 330 mentioned in the description on page 12, line 21.
- d. 37 CFR 1.84(p)(5) because they include the following reference numerals which are not mentioned in the description:
 - i. Fig. 1: 21, 22, 38
 - ii. Fig. 2: 99
 - iii. Fig. 2A: 108
 - iv. Fig. 3: 38A
 - v. Fig. 6: 158

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4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

- 5. The disclosure is objected to because:
 - a. The application mentioned on page 1 should be identified by its patent number.
 - b. On page 6, line 12 reference numeral 17 is used to identify a clutch assembly but on page 7, line 8 it used to identify an upper gearset.
 - c. On page 6, line 15 reference numeral 60 is used to identify a spanner but on page 8, line 13 it used to identify an O-ring seal.
 - d. Page 8, line 13 includes the sentence "The lower end of the shaft 19 is connected to the lower pinion gear 68 and the shim 65, lower bearing 64, preload shim 61 installed." The meaning of the sentence is not clear. Fig. 5 shows lower shim 65 at the top end, not the lower end, of shaft 19.
 - e. On page 8, lines 17 & 19 reference numeral 47 is used to identify a surface but in line 19 it used also to identify a flange.
 - f. On page 8, line 19, the bore 48 is described as being "in the flange 47" but Fig. 2A shows the bore 48 in the flange 42.
 - g. On page 12, line 7 the reference numeral 236 should be changed to 326.
 - h. On page 12, lines 19 & 22 the reference numeral 356 should be changed to 350. See Fig. 8.

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i. On page 12, line 20 "4" should be changed to "four".

- 6. The listing of a reference in the specification as on page 1 is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the reference(s) has been cited by the examiner on form PTO-892, it has not been considered.
- 7. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for subject matter of claim 5.

Claim Objections

8. Claim 5 is objected to because in line 2 "or" should be changed to "and" in order to comply with correct *Markush* format. See MPEP § 2173.05(h).

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the

invention. Claim 5 contains the limitation "4140, 4130, 4340, 8640, [and] 300M". Where a government or industry standard is used in a claim as a limitation, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph because the claim scope is uncertain since standards are subject to change over time. In order to overcome this rejection, the effective date of the standard applied should be included in the specification (no new matter can be entered). Applicant should file a copy of the standard, (excerpts of the applicable portions are acceptable), via an information disclosure statement filed in accordance with 37 CFR 1.97 and 1.98.

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Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- Claims 1-3, 6-8 & 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mixer, US 301,512. Fig. 2 shows an upper gearset support comprising: a generally axially body (the right element B) dimensioned to extend substantially the length of an upper case body defining an internal bore to receive a drive shaft and/or a bearing, the body having an upper end (left end) and a lower end (right end). The upper end of the body B is configured to receive an upper

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gearset and clutch assembly. Fig. 2 shows the upper gearset support further comprising a first retainer (the element A on the left end of the right element B) and a second retainer (the element A on the right end of the right element B) on the body. Fig. 2 shows both retainers A are threaded on the body B and so therefore both retainers are adjustable relative to the body to secure the support in engagement with a housing. Each retainer A includes at least one bore. The surface of each retainer A is configured to conform to the peripheral surface area of an upper case.

- 13. Claims 1-3, 6-8 & 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark, US 924,039. See in Fig. 2 the support comprising body 13 having two threaded ends with two retainers adjustable thereon.
- 14. Claims 1-3, 8 & 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Travis, US 5,813,706. Fig. 4 shows an upper gearset support comprising: a generally axially body 30 dimensioned to extend substantially the length of an upper case body defining an internal bore to receive a drive shaft and/or a bearing, the body having an upper end 34 and a lower end 36. The upper end of the body is configured to receive an upper gearset and clutch assembly. Fig. 4 shows the upper gearset support further comprising a first adjustable retainer 40 and a second retainer 38. Fig. 2 shows the first retainer 40 includes at least one threaded bore 50.
- 15. Claims 1, 2, 5 & 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Payne, US 6,254,443. Figs. 2 & 3 show an upper gearset support comprising: a generally axially body

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10 dimensioned to extend substantially the length of an upper case body defining an internal bore to receive a drive shaft and/or a bearing, the body having an upper end and a lower end. The upper end of the body is configured to receive an upper gearset and clutch assembly. Fig. 3 shows the upper gearset support further comprising a first retainer/flange 13 and a second retainer 23 on the body. Fig. 3 shows the second retainers 23 is adjustable relative to the body to secure the support in engagement with a housing. The surface of the second retainer 23 is configured to conform to the peripheral surface area of an upper case. In col. 3, line 3 the support is disclosed as being made from 4130 machine steel. Fig. 3 shows the upper end of the body carries a bearing cup 19b.

Claim Rejections - 35 USC § 103

- 16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mixer in view of 17. Metzger, US 1,186,325. In Figs. 1 & 2 Mixer shows retainer A with a plain bore for receiving a fastener D but does not show the bore as threaded. In Figs. 4 & 5 Metzger shows that a retainer F2 with a threaded bore (for receiving a fastener G) is an art recognized equivalent of a retainer I with a plain bore (for receiving a fastener J). Therefore it would have been obvious to one of ordinary skill in the art to modify the support of Mixer by providing the retainer with a threaded

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bore instead of a plain bore because plain and threaded bores are art recognized equivalent fastener receiving bores as shown in Metzger.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rector, Gorog et al, and Lewis et al each show a support.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone number is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

GREGORY J. BINDA PRIMARY EXAMINER